UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,672	06/20/2001	Ludmila Cherkasova	10006757	8642

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER
JOO, JOSHUA

ART UNIT	PAPER NUMBER
2154	

DATE MAILED: 04/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
		09/886,672	CHERKASOVA ET AL.
Office Action Summary		Examiner	Art Unit
		Joshua Joo	2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>22 December 2004</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1,2 and 4-25* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☒ Claim(s) *7 and 14-25* is/are allowed.

6) ☒ Claim(s) *1,2,4-6 and 8-13* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>20 June 2001</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

1.   Claims 1-2, 4-25 are presented for examination.

2.   Claims 7, 14-25 are allowed.

3.   Claims 1-2, 4-6, 8-13 are rejected.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5.   Claims 1-2, 4-6, 8-10, 12, 13 are rejected under 35 U.S.C. 102(e) as being unpatentable

by Logue et al, US Patent #6,330,606 (Logue hereinafter).

6.   As per claim 1, Logue teaches an invention of a plurality of nodes where each node of

said plurality of nodes comprises of:

        a)   At least said set of core files stored locally thereto (Col 10, lines 13-19. The hash

result of a URL may be used to identify two or more proxy servers to provide redundancy. A

popular document can be shared among the proxy servers.);

        b)   A distributor component for distributing a request to a specific node of said

plurality of nodes (Fig. 10, #1030. Col 10, lines 48-50. The request is forwarded to the

appropriate proxy server.);

c)   A dispatcher component comprising routing information for said plurality of

nodes and replicated across said plurality of nodes, wherein routing information indicates which

said node of plurality of nodes is for processing said request, said dispatcher component

coupled to said distributor component (Col 10, lines 20-29. Dispatcher may be incorporated into

each server. The proxy server determines which server is appropriate for the request.);

d)   A server component for processing said request, said server component coupled

to said dispatcher component (Col 10, lines 50-52. The proxy server attempts to serve the

request from its local document cache.);

e)   Plurality of nodes are coupled to a network. (Fig. 4, #3. Col 3, lines 43. Network

infrastructure such as the Internet.).

7.   As per claim 2, Logue teaches the invention of claim 1, where the server cluster is a web

server cluster (Fig. 4, #415. Col 5, line 57. Hit accumulator server may act as a Web server.).

8.   As per claim 4, Logue teaches the invention of claim 1, where the cluster memory is a

combined random access memory of each said nodes of said server cluster (Col 4, lines 32-33.

Server has random access memory. Col 5, lines 5-6. The proxy server includes a document

cache. Col 9, lines 56-57. Invention can comprise a plurality of proxy servers.).

9.   As per claim 5, Logue teaches the invention of claim 1, where each of said plurality of

nodes further comprises a set of partitioned files (Col 10, lines 13-19. Web information may be

in a cluster of two or more proxy servers. A popular document can be shared among the proxy

servers. Col 9, lines 62-66. The contents of the web are distributed among the proxy servers.

A URL is mapped to only one of the plurality of proxy servers.).

10.   As per claim 6, Logue teaches the invention of claim 1, where the set of core files

comprises a set of most frequently accessed files of said set of base files (Col 5, lines 20-22.

Proxy has a cache to retrieve local documents.).

11.   As per claim 8, Logue teaches an invention for managing request distribution to a set of

files stored on a server, where the invention comprises:

     a)   i.   Receiving a request for a file at a first node of plurality of nodes. (Col 10, lines 24-25. Client request may be initially handled by one of the proxy servers.)

          ii.   Each node comprising a distributor component for distributing request to a specific node of said plurality of nodes. (Col 10, lines 24-27. Request can be handled by one of the proxy servers. The initial proxy server may forward the request to the appropriate server.)

          iii.   Each node comprising a dispatcher component comprising routing information for said plurality of nodes and replicated across said plurality of nodes. (Col 10, lines 22-23. Dispatcher may be in each server.)

          iv.   Each node comprising a server component for processing said request. (Col 10, lines 50-51. The server attempts to service the request from its local cache.)

     b)   Provided said request is for a core file, processing said request at said first node

irrespective of which of the nodes is the first node that received the request. (Col 10, lines 23-

25, 41-44. Client request can be handled by one of the proxy servers. The receiving proxy

server may assume it is the appropriate server and first check its cache for the file.)

     c)   Provided said request is for a partitioned file, determining whether said request is

assigned to be processed by said first node.

          i.   Provided said request is for a partitioned file assigned to be processed by said first node, processing said request at said first node. (Col 9, line 62-64. The content of the web can be distributed among proxy servers. Col 10, lines 42-44. The initial proxy server may assume it is the appropriate server and attempts to serve the request.)

        ii.   Provided said request is for a partitioned file assigned to be processed by another node of said plurality of nodes as indicated by said dispatcher component of said first node and processing said request at said specific node. (Col 10, lines 48-54. Initial server determines appropriate server and forwards request to the server. If found in cache, the server processes request from local document cache.)

d)   Provided said request is not for a said core file or a said partitioned file,

processing said request at said first node. (Col 10, lines 53-54. If a cache miss occurs, the

server will retrieve the document from an appropriate server and store the copy locally.).

12.   As per claim 9, Logue teaches the invention of claim 8, where the server is a web server.

(Fig. 4, #415. Col 5, line 57. Hit accumulator server may act as a Web server.).

13.   As per claim 10, Logue teaches the invention of claim 9, where the invention comprises

a set of base files wherein said base files are a set of frequently accessed files fitting into a

cluster memory of said web server cluster (Col 5, line 20-22. Proxy has a cache to retrieve local

documents.).

14.   As per claim 12, Logue teaches the invention of claim 8, where each of said plurality of

nodes further comprises a set of core files comprising said core file and set of partitioned files

comprising said partitioned file (Col 10, lines 13-19. Web information may be in a cluster of two

or more proxy servers. A popular document can be shared among of the proxy servers. Col 9,

lines 62-66. The contents of the web are distributed among the proxy servers. A URL is

mapped to only one of the plurality of proxy servers.).

15.   As per claim 13, Logue teaches the invention of claim 8, wherein said set of core files

comprises a set of most frequently accessed files of said set of base files (Col 5, lines 20-22.

Proxy has a cache to retrieve local documents.).

Claim Rejections - 35 USC § 103

16.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

17.   Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Logue and in

view of Brendel et al, US Patent #5,774,660 (Brendel hereinafter).

18.   Logue teaches an invention where a server cluster has a plurality of nodes, where each

node can serve requests for core files and partitioned files.

19.   Logue fails to teach that his invention has files on disk.

20.   Brendel teaches an invention for a multi-node server, where each server has a different

content of file on its local disk, but also have frequently accessed files replicated on all servers

(Col 10, lines 54-65).   It would have been obvious to one of ordinary skill in the art at the time

the invention was made to combine Logue's invention with Brendel's server with files on disk

because both inventions are trying to maximize server efficiency. By combining the server with

the files on disk as disclosed in Brendel's invention with Logue's invention, it would improve the

capability of Logue's invention by allowing access to files from a secondary source to service

client requests.

Response to Amendment

21.   Applicant argues that (1) Logue fails to teach claim 1, "wherein a total of the partitioned

size added to the product of the number of said plurality of nodes multiplied by the core size is

no greater than the cluster memory; and wherein each node of said plurality of nodes

comprises:".

Examiner traverses the argument:

22.   As to point (1), the preamble of the claim is not given patentable weight, thus it is not

given consideration. If the applicant amends claim 1 to include the previously amended section

into the body of claim 1, the claim will be in condition for allowance.

Conclusion

23.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as

set forth in 37 CFR 1.136(a).

24.   A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

25.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Joo whose telephone number is 571 272-3966 and fax number is 571 273-3966. The examiner can normally be reached on Monday to Thursday 8 to 5:30.

26.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on 571 272-3964.

27.   Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 28, 2005
JJ

JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100